

Abstract

Disclosed is an optical component, which comprises a prism element adjacent to a lens element, where the two elements are separated by a small air gap. In disclosed
5 embodiments, the elements have adjacent and parallel surfaces which are substantially planar and which, with the small air gap, operate through Total Internal Reflection (“TIR”) to direct light beams that strike the planar surfaces. Light beams that strike at less than the critical angle are internally reflected, while light beams which strike at greater than the critical angle pass through. The TIR surfaces thereby separate the desired
10 optical signals from the spurious ones. The combined TIR prism lens operates as a single and integrated component which directs desired light beams to a reflective optical processing element such as a Spatial Light Modulator and which focuses the processed light beams as they leave the combined TIR prism lens.

T01E2T 9065901